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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/314,034	05/18/1999	MARK F. SCHULZ	54565USA4A	4599

32692 7590 11/19/2003

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EXAMINER	
SHEWAREGED, BETELHEM	

ART UNIT	PAPER NUMBER
1774	

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/314,034	SCHULZ ET AL.	
	Examiner	Art Unit	
	Betelhem Shewareged	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 August 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22,25-31 and 33-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *33-39* is/are allowed.

6)☒ Claim(s) *22 and 25-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. Applicant's response filed on 08/25/2003 has been fully considered. The double patenting and the 35 U.S.C. 112 rejections have been withdrawn in view of Applicant's amendments and comments.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The composition of the pigment management system is questioned. Claim 22 limits the composition of the multivalent salts to those having a metal cation of Cr, Cu or Ta. Claim 29, however, claims multivalent salts of ferrous sulfate, magnesium sulfophthalate, zirconium sulfophthalate, zirconium phthalate, zinc acetate, zinc chloride and magnesium sulfate, i.e., salts having a metal cation of Fe, Mg, Zr or Zn. It is not clear if it was intended. It is not clear if the pigment management system comprises only ferrous sulfate, magnesium sulfophthalate, zirconium sulfophthalate, zirconium phthalate, zinc acetate, zinc chloride, magnesium sulfate or a combination thereof. Clarification is requested. For the purposes of examination, it has been assumed that the system comprises ferrous sulfate, magnesium sulfophthalate, zirconium sulfophthalate, zirconium phthalate, zinc acetate, zinc chloride, magnesium sulfate or a combination thereof in lieu of the metal cations of claim 22.

Claim Rejections - 35 USC § 103

4. Claims 22 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovacs (US 6,206,517) in view of Akutsu (GB 2147003).

Response to Arguments

5. Applicant's argument is based on that neither Kovacs nor Akutsu discloses the claimed multivalent salts. This argument is not persuasive because the Akutsu reference teaches zinc chloride as the multivalent salt.

6. Claims 22, 25, 26, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace (US 4,889,765) in view of Akutsu (GB 2147003).

Response to Arguments

7. Applicant's argument is based on that neither Wallace nor Akutsu discloses the claimed multivalent salts. This argument is not persuasive because the Akutsu reference teaches zinc chloride as the multivalent salt.

8. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovacs (US 6,206,517) in view of Akutsu (GB 2147003), as applied to claims 22 and 25-29, in further view of Hasegawa (US 4,954,395).

Response to Arguments

9. Applicant's argument is based on that neither Kovacs nor Akutsu discloses the claimed multivalent salts. This argument is not persuasive because the Akutsu reference teaches zinc chloride as the multivalent salt.

Allowable Subject Matter

10. Claims 33-39 are allowed. The closest arts Kovacs and Akutsu fail to teach or suggest aluminum sulfophthalate, aluminum sulfoisophthalate or a combination thereof as the multivalent metal salt.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 703-305-0389. The examiner can normally be reached on Mon.-Thur. 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 703-308-0449. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

BS B.S.
November 15, 2003.

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Cynthia H Kelly